



[6450-01-P]

DEPARTMENT OF ENERGY

10 CFR Part 431

(Docket No. EERE-2010-BT-STD-0043)

RIN: 1904-AC36

Energy Conservation Program for High-Intensity Discharge Lamps: Public Meeting and Availability of the Interim Technical Support Document

AGENCY: Office of Energy Efficiency and Renewable Energy, Department of Energy.

ACTION: Notice of public meeting and availability of interim technical support document.

SUMMARY: The U.S. Department of Energy (DOE) will hold a public meeting to discuss and receive comments on the interim analysis it has conducted for purposes of establishing energy conservation standards for high-intensity discharge (HID) lamps. The meeting will cover the analytical framework, models, and tools that DOE is using to evaluate standards for this equipment; the results of interim analyses performed by DOE for this equipment; the potential energy conservation standard levels derived from these analyses that DOE could consider for this equipment; and any other issues relevant to the development of energy conservation standards for HID lamps. In addition, DOE encourages written comments on these subjects. To inform interested parties and facilitate this process, DOE has prepared an agenda, an interim technical support document (TSD), and briefing materials, which are available on the DOE website at:

http://www1.eere.energy.gov/buildings/appliance_standards/rulemaking.aspx/ruleid/23.

DATES: DOE will hold a public meeting on April 2, 2013, from 9:00 a.m. to 4:00 p.m., in Washington, DC. Additionally, DOE plans to allow for participation in the public meeting via webinar. DOE will accept comments, data, and other information regarding this rulemaking before or after the public meeting, but no later than **[INSERT DATE 50 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**. See section IV, “Public Participation,” of this notice of public meeting (NOPM) for details.

ADDRESSES: The public meeting will be held at the U.S. Department of Energy, Forrestal Building, Room 8E-089, 1000 Independence Avenue SW, Washington, DC 20585–0121. Please note that foreign nationals participating in the public meeting are subject to advance security screening procedures which require advance notice prior to attendance at the public meeting. If a foreign national wishes to participate in the public meeting, please inform DOE of this fact as soon as possible by contacting Ms. Brenda Edwards at (202) 586-2945 so that the necessary procedures can be completed. DOE requires visitors to have laptops and other devices, such as tablets, checked upon entry into the building. Please report to the visitor’s desk to have devices checked before proceeding through security.

Interested parties may submit comments, identified by docket number EERE-2010-BT-STD-0043 and/or Regulation Identifier Number (RIN) 1904-AC36, by any of the following methods:

- Federal eRulemaking Portal: www.regulations.gov. Follow the instructions for submitting comments.
- Email: HIDLamps-2010-STD-0043@ee.doe.gov. Include the docket number EERE-2010-BT-STD-0043 and/or RIN 1904-AC36 in the subject line of the message.
- Postal Mail: Ms. Brenda Edwards, U.S. Department of Energy, Building Technologies Program, Mailstop EE-2J, Interim Analysis for High-Intensity Discharge Lamps, EERE-2010-BT-STD-0043 and/or RIN 1904-AC36, 1000 Independence Avenue, SW, Washington, DC 20585-0121. If possible, please submit all items on a compact disc (CD), in which case it is not necessary to include printed copies. [Please note that comments and CDs sent by mail are often delayed and may be damaged by mail screening processes.]
- Hand Delivery/Courier: Ms. Brenda Edwards, U.S. Department of Energy, Building Technologies Program, 950 L'Enfant Plaza, SW, Suite 600, Washington, DC 20024. If possible, please submit all items on a CD, in which case it is not necessary to include printed copies.

Docket: The docket is available for review at www.regulations.gov, including Federal Register notices, framework documents, public meeting attendee lists and transcripts, comments, and other supporting documents and materials. All documents in the docket are listed in the <http://www.regulations.gov> index. However, not all documents listed in the index may be publicly available, such as information that is exempt from public disclosure.

The rulemaking web page can be found at:

http://www1.eere.energy.gov/buildings/appliance_standards/rulemaking.aspx/ruleid/23. This web page contains a link to the docket for this notice on the regulations.gov site. The regulations.gov web page contains instructions on how to access all documents, including public comments, in the docket.

For detailed instructions on submitting comments and additional information on the rulemaking process, see section IV, “Public Participation,” of this document. For further information on how to submit a comment, review other public comments and the docket, or participate in the public meeting, contact Ms. Brenda Edwards at (202) 586-2945 or by email: brenda.edwards@ee.doe.gov.

FOR FURTHER INFORMATION CONTACT:

Ms. Lucy deButts, U.S. Department of Energy, Office of Energy Efficiency and Renewable Energy, Building Technologies, EE-2J, 1000 Independence Avenue, SW, Washington, DC 20585-0121. Telephone: (202) 287-1604. Email: high_intensity_discharge_lamps@ee.doe.gov.

Or visit DOE’s HID lamps web page at

http://www1.eere.energy.gov/buildings/appliance_standards/product.aspx/productid/60 for information about any existing standards and test procedures, and the history and impacts of previous DOE regulatory actions, for this category of equipment.

In the Office of the General Counsel, contact Ms. Elizabeth Kohl, U.S. Department of Energy, Office of the General Counsel, GC-71, 1000 Independence Avenue, SW, Washington, DC 20585-0121. Telephone: (202) 586-7796. Email: elizabeth.kohl@hq.doe.gov.

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I. Authority

Title III, Part B of the Energy Policy and Conservation Act of 1975 (EPCA; 42 U.S.C. 6291–6317), as amended, established the Energy Conservation Program for Consumer Products other than Automobiles. Title III, Part C established the Energy Conservation Program for Certain Industrial Equipment, which includes the high-intensity discharge (HID) lamps addressed in this interim analysis.¹ While HID lamps are defined under Part B, the requirement for DOE to set standards for HID lamps is set forth in Part C. As a result, DOE has determined that the provisions of Part C apply to HID lamps.

¹ For editorial reasons, upon codification in the U.S. Code, Parts B and C were re-designated Parts A and A-1, respectively.

EPCA requires the U.S. Department of Energy (DOE) to prescribe testing requirements for those HID lamps for which DOE makes a determination that energy conservation standards would be technologically feasible and economically justified, and would result in significant energy savings. (42 U.S.C. 6317(a)(1)). EPCA further requires DOE, within 18 months of prescribing any testing requirements for HID lamps, to prescribe energy conservation standards for those lamps. (42 U.S.C. 6317(a)(2)). Any standards would apply to lamps manufactured 36 months after the date the standards rule is published. (42 U.S.C. 6317(a)(3)).

Energy conservation standards adopted by DOE must: (1) achieve the maximum improvement in energy efficiency that is technologically feasible and economically justified; and (2) result in significant conservation of energy. (42 U.S.C. 6295(o)(2)(A) and (o)(3)(B)). To determine whether a proposed standard is economically justified, DOE will, after receiving comments on the proposed standard, determine whether the benefits of the standard exceed its burdens by, to the greatest extent practicable, considering the following seven factors:

1. the economic impact of the standard on manufacturers and consumers of products subject to the standard;
2. the savings in operating costs throughout the estimated average life of the covered products in the type (or class) compared to any increase in the price, initial charges, or

maintenance expenses for the covered products which are likely to result from the imposition of the standard;

3. the total projected amount of energy savings likely to result directly from the imposition of the standard;
4. any lessening of the utility or the performance of the covered products likely to result from the imposition of the standard;
5. the impact of any lessening of competition, as determined in writing by the Attorney General, that is likely to result from the imposition of the standard;
6. the need for national energy conservation; and
7. other factors the Secretary [of Energy] considers relevant.

(42 U.S.C. 6295(o)(2)(B)(i))

Additional statutory requirements of general applicability for prescribing new or amended standards are set forth in 42 U.S.C. 6295(o)(1)–(5), 42 U.S.C. 6316(a), and other relevant sections of EPCA.

Before proposing a standard, DOE typically seeks public input on the analytical framework, models, and tools that DOE will use to evaluate standards for HID lamps and the results of interim analyses. Today’s document announces the availability of the interim TSD,

which details the interim analyses, discusses the comments DOE received from interested parties on the Framework Document, and summarizes the interim results of DOE's analyses. In addition, DOE is announcing a public meeting to solicit feedback from interested parties on its analytical framework, models, and interim results.

II. History of Energy Conservation Standards Rulemakings for High-Intensity Discharge Lamps

A. Background

As mentioned in the previous section, EPCA requires DOE to prescribe testing requirements for those HID lamps for which DOE makes a determination that energy conservation standards would be technologically feasible and economically justified, and would result in significant energy savings. (42 U.S.C. 6317(a)(1)). Further, within 18 months of prescribing any test procedures, EPCA requires DOE to prescribe energy conservation standards for those lamps; standards would apply to lamps manufactured 36 months after the date the standards rule is published. (42 U.S.C. 6317(a)(2)-(3)).

DOE published a positive final determination² (hereafter the “final determination”) that standards for certain HID lamps are technologically feasible, economically justified, and would result in a significant energy savings. 75 FR 37975 (July 1, 2010). As a result of this determination, DOE is currently conducting a test procedure rulemaking for the specified lamps,³

² The final determination is available at:
http://www1.eere.energy.gov/buildings/appliance_standards/product.aspx/productid/60.

³ DOE published a proposed test procedure NOPR on December 15, 2011 (76 FR 77914).

as well as conducting this standards rulemaking. On February 28, 2012, DOE published a notice announcing the availability of the framework document, “Framework Document for High-Intensity Discharge Lamps,” and a public meeting to discuss the proposed analytical framework for the rulemaking. 77 FR 11785. DOE also posted the framework document on its website, in which DOE described the procedural and analytical approaches DOE anticipated using to evaluate the establishment of energy conservation standards for HID lamps.

DOE held the public meeting for the framework document on March 29, 2012,⁴ to describe the various rulemaking analyses DOE would conduct, such as the engineering analysis, the life-cycle cost (LCC) and payback period (PBP) analyses, and the national impact analysis (NIA); the methods for conducting them; and the relationship among the various analyses. Manufacturers, trade associations, and energy efficiency advocates attended the meeting. The participants discussed multiple issues, including the scope of coverage; the appropriateness of lumen output as an equipment class-setting factor; the metrics of initial and mean lamp efficacy; the technological shift from HID lamps to light-emitting diode (LED) lighting; the necessity of changing ballasts and fixtures when moving to more efficacious HID lamps; the potential for increased testing burden.

B. Current Rulemaking Process

In this interim analysis, DOE considers whether and at what level(s) to promulgate energy conservation standards for certain HID lamps. Comments received since the publication of the framework document have helped DOE identify and resolve issues involved in the interim

⁴ The framework document and public meeting information can be accessed at: http://www1.eere.energy.gov/buildings/appliance_standards/rulemaking.aspx/ruleid/23.

analyses. The process for developing energy conservation standards involves input from the public. DOE considers the participation of interested parties to be a very important part of the rulemaking process. Accordingly, DOE encourages the participation of all interested parties during the comment period provided at each stage of the rulemaking.

In conducting energy conservation standards rulemakings, DOE involves interested parties through various means. This standards rulemaking process for HID lamps involves four public notices, published in the Federal Register, and three public meetings (including the public notice and meeting associated with the framework document previously mentioned).

The interim analysis allows for public comment on the data, models, and tools that DOE expects to use in the rulemaking. These data, as discussed in section III, include equipment classes and candidate standard levels (CSLs), which span the range of efficacies from baseline equipment⁵ to the most efficacious technology. DOE requests comment and will hold a public meeting and webinar related to the interim analyses on the day specified in the DATES section. After the interim analysis public meeting, DOE will publish a notice of proposed rulemaking (NOPR) presenting a discussion of comments received in response to the framework document and interim analyses, along with DOE's analysis of the effects of potential standards on

⁵ DOE selected baseline lamps as representative equipment. Generally, a baseline lamp is one that represents the most common, least efficacious lamp sold within an equipment class. DOE selected multiple baseline lamps to ensure consideration of different high-volume lamps and their associated customer economics (*e.g.*, customers of mercury vapor lamp-and-ballast systems incur different costs than customers of metal halide lamp-and-ballast systems).

customers, manufacturers, and the nation; DOE's weighting of these effects; and the proposed standard levels for public comment.

III. Summary of the Analyses

DOE conducted in-depth technical analyses in the following areas for the HID lamps currently under consideration: (1) engineering, (2) markups to determine equipment price; (3) energy use; (4) life-cycle cost and payback period; and (5) national impact. The interim TSD presents the methodology and results of each of these analyses is available at

http://www1.eere.energy.gov/buildings/appliance_standards/product.aspx/productid/60.

DOE also conducted, and has included in the interim TSD, several other analyses that support the major analyses or are interim analyses that will be expanded upon for a NOPR if DOE determines that new energy conservation standards are technologically feasible, economically justified, and would save a significant amount of energy, based on the information presented to the Department. These analyses include: (1) the market and technology assessment; (2) the screening analysis, which contributes to the engineering analysis; and (3) the shipments analysis, which contributes to the LCC and PBP analysis and NIA. In addition to these analyses, DOE has begun preliminary work on the manufacturer impact analysis and has identified the methods to be used for the consumer subgroup analysis, the emissions analysis, the employment impact analysis, the regulatory impact analysis, and the utility impact analysis. DOE will expand on these analyses in any NOPR.

A. Engineering Analysis

In energy conservation standard rulemakings for other equipment, DOE often develops cost-efficiency relationships in the engineering analysis. However, for this HID lamp rulemaking, DOE derives efficiency levels in the engineering analysis and lamp end-user prices in the equipment price determination. DOE also develops ballast and fixture manufacturer selling prices (MSPs) in the equipment price determination, because a change of ballast and fixture is often required when transitioning to a more efficacious, reduced-wattage lamp. The engineering analysis focuses on selecting commercially available lamps that incorporate design options that improve efficacy. The engineering analysis identifies both the highest efficacy that is technologically feasible within each equipment class and the representative baseline models, which serve as reference points against which DOE can measure changes resulting from potential energy conservation standards. After identifying more efficacious substitutes for each baseline model, DOE developed CSLs. Chapter 2 and 5 of the interim TSD discuss the engineering analysis, and chapter 2 and 6 and appendix 6A of the interim TSD discuss the equipment price determination.

B. Markups to Determine Prices

Because DOE estimated HID lamp end-user prices directly, markups were not needed to relate MSPs to end-user prices for lamps. In its markup analysis, DOE evaluates distribution channels for HID lamps to help develop end-user equipment prices for ballasts and fixtures for the LCC analysis and NIA. Chapters 2 and 7 of the interim TSD provide detail on the estimation of markups.

C. Energy Use Analysis

The energy use analysis provides estimates of the annual energy consumption of HID lamps. The energy use analysis seeks to estimate the range of energy consumption of the equipment that meet each of the efficiency levels considered in a given rulemaking as they are used in the field. DOE uses these values in the LCC and PBP analyses and in the NIA. Chapters 2 and 8 of the interim TSD provide detail on the energy use analysis.

D. Life-Cycle Cost and Payback Period Analyses

The LCC and PBP analyses determine the economic impact of potential standards on individual consumers. The LCC is the total cost of purchasing, installing, operating, and maintaining considered equipment over the course of its lifetime. The LCC analysis compares the LCCs of equipment designed to meet possible energy conservation standards with the LCC of the equipment likely to be installed in the absence of standards. DOE determines LCCs by considering: (1) total installed cost to the purchaser (which consists of manufacturer selling price, distribution chain markups, sales taxes, and installation cost); (2) the operating cost of the equipment (energy cost, water and wastewater cost in some cases, and maintenance and repair cost); (3) equipment lifetime; and (4) a discount rate that reflects the real consumer cost of capital and puts the LCC in present-value terms. The PBP represents the number of years needed to recover the increase in purchase price (including installation cost) of higher-efficacy, reduced-wattage equipment through savings in the operating cost of the equipment. PBP is calculated by dividing the incremental increase in installed cost of the higher efficiency product, compared to the baseline equipment, by the annual savings in operating costs. Chapters 2 and 9 of the interim TSD provide detail on the LCC and PBP analysis.

E. National Impact Analysis

The NIA estimates the national energy savings (NES) and the net present value (NPV) of total customer costs and savings expected to result from new standards at specific efficiency levels (referred to as candidate standard levels). DOE calculates NES and NPV for each candidate standard level for HID lamps as the difference between a base-case projection (without new standards) and the standards-case projection (with standards). Cumulative energy savings are the sum of the annual NES determined for the lifetime of the equipment shipped from 2017 to 2046. The NPV is the sum over time of the discounted net savings each year, which consists of the difference between total operating cost savings and increases in total installed costs. To calculate energy use, equipment stock in a given year is multiplied by annual energy use. DOE calculates the national NPV of the customer savings resulting from energy conservation standards in conjunction with the NES. It calculates annual energy expenditures from annual energy use by incorporating projected energy prices and installed stock in each year. DOE calculates annual equipment expenditures by multiplying the projected shipments by the projected price per lamp, adjusted by AEO2011 price trend projections. The difference between a base-case and a standards-case scenario gives the national energy bill savings and increased equipment expenditure in dollars. Chapters 2 and 11 of the interim TSD provide more detail on the NIA.

IV. Public Participation

DOE invites input from the public on all the topics described above. The interim analytical results are subject to revision following further review and input from the public. A complete and revised TSD will be made available upon issuance of any NOPR. A final rule

establishing any new energy conservation standards would contain the final analytical results and will be accompanied by a final rule TSD.

DOE encourages those who wish to participate in the public meeting to obtain the interim TSD from DOE's website and to be prepared to discuss its contents. A copy of the interim TSD is available at:

http://www1.eere.energy.gov/buildings/appliance_standards/rulemaking.aspx/ruleid/23.

However, public meeting participants need not limit their comments to the topics identified in the interim TSD; DOE is also interested in receiving views concerning other relevant issues that participants believe would affect energy conservation standards for this product or that DOE should address in the NOPR.

Furthermore, DOE welcomes all interested parties, regardless of whether they participate in the public meeting, to submit in writing by **[INSERT DATE 50 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]** comments, data, and information on matters addressed in the interim TSD and on other matters relevant to consideration of energy conservation standards for HID lamps.

The public meeting and associated webinar will be conducted in an informal, conference style. A court reporter will be present to record the minutes of the meeting. There shall be no discussion of proprietary information, costs, prices, market shares, or other commercial matters regulated by United States antitrust laws.

After the public meeting and the closing of the comment period, DOE will consider all timely-submitted comments and additional information obtained from interested parties, as well as information obtained through further analyses. Afterwards, DOE will publish either a determination that the standards for HID lamps need not be amended or a NOPR proposing to amend those standards. Any NOPR would include proposed energy conservation standards for the equipment covered by the rulemaking, and members of the public will be given an opportunity to submit written and oral comments on the proposed standards.

A. Attendance at Public Meeting

The time and date of the public meeting are listed in the **DATES** and **ADDRESSES** sections at the beginning of this notice. The public meeting will be held at the U.S. Department of Energy, Forrestal Building, Room 8E-089, 1000 Independence Avenue, SW, Washington, DC 20585-0121. To attend the public meeting, please notify Ms. Brenda Edwards at (202) 586-2945. Any foreign national wishing to participate in the meeting should advise DOE of this fact as soon as possible by contacting Ms. Brenda Edwards to initiate the necessary procedures.

You can attend the public meeting via webinar, and registration information, participant instructions, and information about the capabilities available to webinar participants will be published on the following website:

http://www1.eere.energy.gov/buildings/appliance_standards/rulemaking.aspx/ruleid/23.

Participants are responsible for ensuring their computer systems are compatible with the webinar software.

The purpose of the meeting is to receive comments and to help DOE understand potential issues associated with this rulemaking. DOE must receive requests to speak at the meeting before 4:00 p.m. March 19, 2013. DOE must receive a signed original and an electronic copy of statements to be given at the public meeting before 4:00 p.m. March 26, 2013.

B. Procedure for Submitting Requests to Speak

Any person who has an interest in today's notice or who is a representative of a group or class of persons that has an interest in these issues may request an opportunity to make an oral presentation. Such persons may hand-deliver requests to speak, along with a computer diskette or CD in WordPerfect, Microsoft Word, PDF, or text (ASCII) file format to Ms. Brenda Edwards at the address shown in the **ADDRESSES** section at the beginning of this notice between 9:00 a.m. and 4:00 p.m. Monday through Friday, except Federal holidays. Requests may also be sent by mail to the address shown in the **ADDRESSES** section or email to Brenda.Edwards@ee.doe.gov.

Persons requesting to speak should briefly describe the nature of their interest in this rulemaking and provide a telephone number for contact. DOE requests persons selected to be heard to submit an advance copy of their statements at least two weeks before the public

meeting. At its discretion, DOE may permit any person who cannot supply an advance copy of their statement to participate, if that person has made advance alternative arrangements with the Building Technologies Program. The request to give an oral presentation should ask for such alternative arrangements.

C. Conduct of Public Meeting

DOE will designate a DOE official to preside at the public meeting and may also employ a professional facilitator to aid discussion. The meeting will not be a judicial or evidentiary-type public hearing, but DOE will conduct it in accordance with section 336 of EPCA. (42 U.S.C. 6306) A court reporter will record the proceedings and prepare a transcript. DOE reserves the right to schedule the order of presentations and to establish the procedures governing the conduct of the public meeting. After the public meeting, interested parties may submit further comments on the proceedings as well as on any aspect of the rulemaking until the end of the comment period.

The public meeting will be conducted in an informal conference style. DOE will present summaries of comments received before the public meeting, allow time for presentations by participants, and encourage all interested parties to share their views on issues affecting this rulemaking. Each participant will be allowed to make a prepared general statement (within DOE-determined time limits) prior to the discussion of specific topics. DOE will permit other participants to comment briefly on any general statements.

At the end of all prepared statements on a topic, DOE will permit participants to clarify their statements briefly and comment on statements made by others. Participants should be prepared to answer questions from DOE and other participants concerning these issues. DOE representatives may also ask questions of participants concerning other matters relevant to this rulemaking. The official conducting the public meeting will accept additional comments or questions from those attending, as time permits. The presiding official will announce any further procedural rules or modification of the above procedures that may be needed for the proper conduct of the public meeting.

A transcript of the public meeting will be posted on the DOE website and will also be included in the docket, which can be viewed as described in the **Docket** section at the beginning of this notice. In addition, any person may buy a copy of the transcript from the transcribing reporter.

D. Submission of Comments

DOE will accept comments, data, and other information regarding this rulemaking before or after the public meeting, but no later than the date provided at the beginning of this notice. Please submit comments, data, and other information as provided in the **ADDRESSES** section. Submit electronic comments in WordPerfect, Microsoft Word, PDF, or text (ASCII) file format and avoid the use of special characters or any form of encryption. Comments in electronic format

should be identified by the Docket Number EERE-2010-BT-STD-0043 and/or RIN 1904-AC36 and, wherever possible, carry the electronic signature of the author. No telefacsimiles (faxes) will be accepted.

Pursuant to 10 CFR 1004.11, any person submitting information that he or she believes to be confidential and exempt by law from public disclosure should submit two copies: one copy of the document including all the information believed to be confidential and one copy of the document with the information believed to be confidential deleted. DOE will make its own determination as to the confidential status of the information and treat it according to its determination.

Factors of interest to DOE when evaluating requests to treat submitted information as confidential include: (1) a description of the items; (2) whether and why such items are customarily treated as confidential within the industry; (3) whether the information is generally known by or available from other sources; (4) whether the information has previously been made available to others without obligation concerning its confidentiality; (5) an explanation of the competitive injury to the submitting person which would result from public disclosure; (6) a date upon which such information might lose its confidential nature due to the passage of time; and (7) why disclosure of the information would be contrary to the public interest.

V. Approval of the Office of the Secretary

The Secretary of Energy has approved publication of this notice of public meeting.

Issued in Washington, DC, on February 20, 2013.

Kathleen B. Hogan
Deputy Assistant Secretary for Energy Efficiency
Energy Efficiency and Renewable Energy

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